

IN THE CLAIMS:

Claim Summary

Claims 2, 3, 5-21, 58, 59, 61 and 62 are amended. Claim 60 is cancelled. For the Examiner's convenience, and in accordance with 37 C.F.R. § 1.121, a complete listing of the claims is set forth below with corresponding status identifiers for each claim.

AMENDED CLAIMS

1. (Cancelled).
2. (Currently amended) The A process as defined in claim 59, wherein the carrier-connection element combination is arranged in the housing at an angle to a longitudinal direction when said molding compound is poured in.
3. (Currently amended) The A process as defined in claim 59, wherein the carrier-connection element combination is leaned against an inner wall of the housing when molding compound is poured in.
4. (Cancelled).
5. (Currently amended) The A process as defined in claim 58, wherein the connection element is rigidly connected to the carrier.
6. (Currently amended) The A process as defined in claim 5, wherein a plurality of contact pins of the connection element are connected to the carrier.
7. (Currently amended) The A process as defined in claim 5 wherein the connection element is soldered to the carrier.
8. (Currently amended) The A process as defined in claim 58, wherein a cup-shaped insert is provided for closing the housing at the front end, said insert being pushed into the housing in the direction of the rear end from the front end.
9. (Currently amended) The A process as defined in claim 8, wherein the insert is held on the housing in a force-locking manner after ~~its~~ insertion of the insert into the housing.

10. (Currently amended) The A process as defined in claim 58, wherein the carrier-connection element combination is placed onto a closure element forming the closed front end.

11. (Currently amended) The A process as defined in claim 58, wherein a longitudinal direction of the housing is oriented ~~in its longitudinal direction~~ essentially parallel to ~~the~~ a direction of earth's gravitational force ~~gravity~~ during the introduction of at least one of the carrier-connection element combination and the molding compound.

12. (Currently amended) The A process as defined in claim 58, comprising controlling the amount of molding compound introduced into the housing.

13. (Currently amended) The A process as defined in claim 58, wherein during the capping of the open rear end of the housing, the carrier-connection element combination is aligned in a ~~the~~ longitudinal direction of the housing.

14. (Currently amended) The A process as defined in claim 58, wherein during the capping of the open rear end of the housing, the carrier-connection element combination is aligned essentially collinear to a ~~the~~ longitudinal axis of the housing.

15. (Currently amended) The A process as defined in claim 58, wherein the cap is pushed into the housing.

16. (Currently amended) The A process as defined in claim 15, wherein the cap is pushed into the housing as far as a stop provided on the cap.

17. (Currently amended) The A process as defined in claim 15, wherein the cap is pushed into the housing prior to hardening of

the molding compound.

18. (Currently amended) The A process as defined in claim 58, wherein the cap is positioned on the carrier-connection element combination before the carrier-connection element combination is introduced into the housing interior.

19. (Currently amended) The A process as defined in claim 18, wherein the carrier-connection element combination is pushed into the housing with the cap positioned thereon.

20. (Currently amended) The A process as defined in claim 58, wherein the cap and the connection element are provided with complementary fixing means.

21. (Currently amended) The A process as defined in claim 20, wherein during a connection of the cap with the housing, the cap and the carrier-connection element combination are oriented relative to one another such that the respective fixing means can engage on one another.

22. (Withdrawn) Position sensor comprising a housing (12) for accommodating an electrical circuit (24) arranged on a carrier (22) in a housing interior (16) and an electrical connection element (46), characterized in that the carrier (22) and the connection element (46) are rigidly connected to one another to form a carrier-connection element combination (60) and a molding compound (88) is arranged in a space between the carrier-connection element combination and an inner wall (14) of the housing.

23. (Withdrawn) Position sensor as defined in claim 22, characterized in that the connection element (46) is a plug insert.

24. (Withdrawn) Position sensor as defined in claim 22, characterized in that the connection element (46) is soldered to the carrier (22).

25. (Withdrawn) Position sensor as defined in claim 22, characterized in that the housing (12) is manufactured from metal.

26. (Withdrawn) Position sensor as defined in claim 22, characterized in that the housing (12) is closed at a measuring end (30) with a cup-shaped insert (32).

27. (Withdrawn) Position sensor as defined in claim 26, characterized in that the insert (32) is manufactured from a plastic material.

28. (Withdrawn) Position sensor as defined in claim 26, characterized in that a sealing element (40) is formed on the insert (32) for sealing between the insert (32) and the inner wall (14) of the housing.

29. (Withdrawn) Position sensor as defined in claim 26, characterized in that the insert (32) is designed to be pushed into the housing (12).

30. (Withdrawn) Position sensor as defined in claim 29, characterized in that the insert is designed such that it is positionable on the housing (12) in a force-locking manner.

31. (Withdrawn) Position as defined in claim 22, characterized in that the housing (12) is designed to be essentially rotationally symmetrical.

32. (Withdrawn) Position sensor as defined in claim 22, characterized in that the housing interior (16) has essentially the same cross section over the length of the housing (12).

33. (Withdrawn) Position sensor as defined in claim 22, characterized in that a cap (62) is seated at a rear end (54) of the position sensor (10) facing away from the measuring end (30).

34. (Withdrawn) Position sensor as defined in claim 33, characterized in that the cap (62) is of a plastic material.

35. (Withdrawn) Position sensor as defined in claim 33, characterized in that the cap (62) is at least partially transparent.

36. (Withdrawn) Position sensor as defined in claim 33, characterized in that the cap (62) is pushed into the housing (12).

37. (Withdrawn) Position sensor as defined in claim 36, characterized in that the cap (62) has a stop (84), the insertion into the housing (12) being limited by said stop.

38. (Withdrawn) Position sensor as defined in claim 33, characterized in that the cap has an opening (66) for the connection element (46).

39. (Withdrawn) Position sensor as defined in claim 38, characterized in that the opening is designed such that the carrier-connection element combination (60) is adapted to be fixed in the housing (12) transversely to the longitudinal direction (18) thereof by means of said opening.

40. (Withdrawn) Position sensor as defined in claim 38, characterized in that the opening (66) for the connection element (46) has a smaller diameter than the housing (12).

41. (Withdrawn) Position sensor as defined in claim 33, characterized in that the connection element (46) is provided with a fixing means (96) and the cap (62) with a fixing means (98) adapted thereto and the fixing means (96, 98) are adapted to engage in one another.

42. (Withdrawn) Position sensor as defined in claim 33, characterized in that the cap (62) is provided with an external thread (72).

Claims 43-57 (Cancelled).

58. (Currently amended) A process for fabricating a position sensor, comprising:
providing a housing with a closed front end and an open rear end;
providing a carrier having an electronic circuit thereon;
providing an electrical connection element on said carrier to form a carrier-connection element combination to enable an external connection to said electronic circuit;
introducing said carrier into the open rear end of said housing;
~~introducing~~ pouring a molding compound into said open rear end of said housing for encapsulating said electronic circuit within the housing; and
capping the open rear end of said housing with a cap;
wherein connection portions of said electrical connection element are guided through said cap.

59. (Currently amended) The A process as defined in claim 58,

wherein said carrier is introduced into the open rear end of said housing, and said molding compound is then poured around said carrier.

60. (Cancelled).

61. (Currently Amended) The A process as defined in claim 58, wherein said molding compound is introduced into said housing, and the carrier is then inserted into said molding compound from the open rear end of the housing.

62. (Currently amended) The A process as defined in claim 61, wherein said molding compound is poured into said housing from said open rear end.